IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:	10/693,679	§ Confirmation No.:	8660
Applicant:	Stephanie Marel	§	
Filed:	10/23/2003	§	
TC/A.U.:	2455	§	
Examiner:	Asad M. Nawaz	§	
Title:	Context Filter	§	
Docket No.:	500111540-2 (HPC.0815US)	§	

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF PURSUANT TO 37 C.F.R § 41.37

Sir:

The final rejection of claims 1-14 is hereby appealed.

I. REAL PARTY IN INTEREST

The real party in interest is the Hewlett-Packard Development Company, LP. The Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, TX 77707, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF THE CLAIMS

Claims 1-14 have been finally rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

An Amendment under 37 C.F.R. § 1.116 was submitted on July 2, 2009. However, this Amendment was not entered in view of the issues raised in the Advisory Action dated July 20, 2009.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Independent claim 1 recites a method of matching structured descriptions (Spec., p. 6, ln. 7 – p. 7, ln. 26; Fig. 8:92, 93), the method including the steps of:

a. detecting a context reflecting an environment in which the matching is to occur (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 13-16; p. 18, ln. 3-4);

b. matching the detected context to a concept list appropriate to the detected context (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 17-23; p. 11, ln. 10-16; p. 18, ln. 4-5);

c. using the concept list to transform the structured descriptions into reduced structured descriptions (Spec., p. 10, ln. 3-29; Figs. 8:94, 95; p. 14, ln. 7 – p. 15, ln. 3; Fig. 2:22; Spec., p. 16, ln. 4-11; p. 18, ln. 5-11);

d. matching the reduced structured descriptions (Spec., p. 15, ln. 3-19; Fig. 8:46; Spec., p. 16, ln. 12-16; p. 18, ln. 13-15); and

e. providing an output representing the matching between the structured descriptions (Fig. 8:103; Spec., p. 16, ln. 15-16).

Independent claim 2 recites a method of matching structured descriptions (Spec., p. 6, ln. 7 – p. 7, ln. 26; Fig. 8:92, 93), the method including the steps of:

a. detecting a context reflecting an environment in which the matching is to occur (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 13-16; p. 18, ln. 3-4);

b. using the detected context to transform the structured descriptions into reduced structured descriptions (Spec., p. 10, ln. 3-29; Figs. 8:94, 95; p. 14, ln. 7 – p. 15, ln. 3; Fig. 2:22; Spec., p. 16, ln. 4-11; p. 18, ln. 5-11);

c. matching the reduced structured descriptions (Spec., p. 15, ln. 3-19; Fig. 8:46; Spec., p. 16, ln. 12-16; p. 18, ln. 13-15); and

d. providing an output representing the matching between the structured descriptions (Fig. 8:103; Spec., p. 16, ln. 15-16).

Independent claim 6 recites a method of simplifying a structured description (Spec., p. 6, ln. 7 – p. 7, ln. 26; Fig. 8:92, 93) including the steps of:

a. detecting a context reflecting an environment in which the simplification is to occur (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 13-16; p. 18, ln. 3-4);

b. matching the detected context to a concept list appropriate to the detected context (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 17-23; p. 11, ln. 10-16; p. 18, ln. 4-5);

c. using the concept list to transform the structured descriptions into reduced structured descriptions (Spec., p. 10, ln. 3-29; Figs. 8:94, 95; p. 14, ln. 7 – p. 15, ln. 3; Fig. 2:22; Spec., p. 16, ln. 4-11; p. 18, ln. 5-11).

Independent claim 14 recites a method of facilitating the matching structured descriptions (Spec., p. 6, ln. 7 – p. 7, ln. 26; Fig. 8:92, 93), the method including the steps of:

a. receiving a detected context reflecting an environment in which the matching is to occur (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 13-16; p. 18, ln. 3-4);

b. matching the detected context to a concept list appropriate to the detected context (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 17-23; p. 11, ln. 10-16; p. 18, ln. 4-5);

c. using the concept list to transform the structured descriptions into reduced structured descriptions (Spec., p. 10, ln. 3-29; Figs. 8:94, 95; p. 14, ln. 7 – p. 15, ln. 3; Fig. 2:22; Spec., p. 16, ln. 4-11; p. 18, ln. 5-11);

d. matching the reduced structured descriptions (Spec., p. 15, ln. 3-19; Fig. 8:46; Spec., p. 16, ln. 12-16; p. 18, ln. 13-15); and

e. providing an output representing the matching between the structured descriptions (Fig. 8:103; Spec., p. 16, ln. 15-16).

Claim 13, set forth below, includes means plus function elements, which are identified as required by 37 C.F.R. § 41.37. For each means plus function element, the structure, material, or acts described in the Specification as corresponding to each claimed function is set forth by reference to page and line number, and to the drawings, by reference characters.

Independent claim 13 recites a system for matching structured descriptions (Spec., p. 6, ln. 7 – p. 7, ln. 26; Fig. 8:92, 93) including:

a. means (Fig. 3:63; Fig. 5:63; Fig. 6:74; Fig. 7:85; Fig. 9:203, 205) for detecting a context or receiving a detected context, reflecting an environment in which the matching is to occur (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 13-16; p. 18, ln. 3-4);

b. matching means (Fig. 3:63; Fig. 63; Fig. 6:74; Fig. 7:85; Fig. 8:94, 95; Fig. 9:203, 205) adapted to match the detected context to a concept list appropriate to the detected context stored in a context database (Spec., p. 7, ln. 23 – p. 8, ln. 5; p. 8, ln. 17-23; p. 11, ln. 10-16; p. 18, ln. 4-5);

c. an edit engine (Fig. 2:22; Fig. 3:68) adapted to use the concept list to transform the one or more structured descriptions into reduced structured descriptions (Spec., p. 10, ln. 3-29; Figs. 8:94, 95; p. 14, ln. 7 – p. 15, ln. 3; Fig. 2:22; Spec., p. 16, ln. 4-11; p. 18, ln. 5-11);

d. matching means (Fig. 8:96; Fig. 9:215) adapted to match the reduced structured descriptions (Spec., p. 15, ln. 3-19; Fig. 8:46; Spec., p. 16, ln. 12-16; p. 18, ln. 13-15); and

e. output means (Fig. 8:96; Fig. 9:215) adapted to provide an output representing the matching between the structured descriptions (Fig. 8:103; Spec., p. 16, ln. 15-16).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 4, 8, 10, and 11 were rejected under 35 U.S.C. § 112, ¶ 2. [1]

B. Claims 1-14 were rejected under 35 U.S.C. § 102(b) as being taught by Chen (U.S. Patent No. 6,349,307).

VII. ARGUMENT

The claims do not stand or fall together. Instead, Appellant presents separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-headings as required by 37 C.F.R. § 41.37(c)(1)(vii).

A. Claims 4, 8, 10, 11 were rejected under 35 U.S.C. § 112, ¶ 2.

1. Claims 4, 8, 10, 11.

Claims 4, 8, 10, and 11 were rejected based on the allegation that the phrase "one or more of the structured descriptions" lacks antecedent basis. It is respectfully submitted that "one or more of the structured descriptions" as recited in claim 4 does not lack antecedent basis. The foregoing phrase refers to "structured descriptions" that was introduced in claim 1. Thus, "one or more of" refers to one or more of such structured descriptions.

Thus, according to claim 4, just one or more than one of the structured descriptions can be reduced by matching keywords with keywords in the concept list and removing any unmatched keyword concepts from the corresponding structured description. The scope of claim 4 is therefore not indefinite.

[1] In a telephonic interview between the undersigned and Examiner Nawaz, agreement was reached that the Examiner will withdraw the § 112, ¶ 2, rejection of claims 3-5 and 7-11 based on recitation of "a method as in claim." Therefore, the § 112, ¶ 2 rejection of the foregoing claims based on the language "a method as in claim" has been removed as an issue from appeal.

Claims 8, 10, and 11 are similarly not indefinite.

Reversal of the final rejection of the above claims is respectfully requested.

B. Claims 1-14 were rejected under 35 U.S.C. § 102(b) as being taught by Chen (U.S. Patent No. 6,349,307).

1. Claims 1, 4, 5, 10, 12, 13, 14.

Independent claim 1 recites a method of matching structured descriptions, comprising:

- detecting a context reflecting an environment in which the matching is to occur;
- matching the detected context to a concept list appropriate to the detected context;
- using the concept list to transform the structured descriptions into reduced structured descriptions;
- matching the reduced structured descriptions; and
- providing an output representing the matching between the structured descriptions.

It is respectfully submitted that claim 1 is clearly not anticipated by Chen. Fundamentally, it is respectfully submitted that the subject matter of claim 1 differs significantly from the subject matter of Chen. Column 3 of Chen describes a document retrieval process in which search criteria of a query submitted by a user can be augmented based upon the context within which a user is performing a document search. Chen, 3:3-7. However, augmenting or modifying search criteria of a query, as taught by Chen, is completely different from using a concept list (matched from a detected context reflecting an environment in which the matching is to occur) to transform structured descriptions into reduced structured descriptions, where the reduced structured descriptions are then matched.

The Examiner did not explain exactly what is considered "structured descriptions" in Chen. The Examiner cited column 3, lines 3-15, of Chen, as purportedly disclosing the transformation of structured descriptions into reduced structured descriptions. This cited passage of Chen refers to augmenting search criteria of a query. The cited passage of Chen in column 3

also refers to translating terms and phrases used by authors of documents or by a user who is searching for documents into a common internal vocabulary. Thus, it appears that the Examiner is equating a query with search terms as constituting a structured description. However, modifying the search criteria of a query based upon context, as taught by Chen, is completely different from transforming structured descriptions (note plural sense of structured descriptions) into reduced structured descriptions that are then matched, as recited in claim 1.

Moreover, it is further noted that translating terms and phrases used by authors of documents or by a user who is searching for documents into a common internal vocabulary has nothing to do with using a concept list (matched from a detected context) to transform structured descriptions into reduced structured descriptions.

The Examiner cited the following passage of Chen as purportedly disclosing "matching the reduced structured descriptions": column 8, line 51 – column 9, line 24. The cited passage of Chen refers to a query/result-services module that enhances a user query by formulating the query as a context-sensitive query. Chen, 8:51-54. The cited passage in columns 8 and 9 of Chen also refers to using machine learning or other techniques to provide more effective search patterns based on the observed behavior of the user.

This cited passage in column 8 and 9 of Chen, however, does not provide any teaching or hint of matching reduced structured descriptions that have been transformed using a concept list from structured descriptions, where the concept list is matched from a detected context reflecting an environment in which matching is to occur. If the query as taught by Chen is considered to be a structured description as claimed, then Chen clearly does not disclose matching two queries.

The Examiner also does not explain what specifically constitutes the "concept list" of claim 1. Claim 1 recites matching the detected context to a concept list appropriate to the

detected context. The Examiner argued that the following passages of Chen disclose this element of claim 1: column 3, lines 3-15; column 8, lines 14-37. The cited column 3 passage of Chen refers to augmenting search criteria of a query based upon a context. Since the Examiner appears to equate a query containing the search criteria to the structured description of claim 1, the modified query of Chen cannot constitute the concept list recited in the "matching" element of claim 1.

The cited column 3 passage of Chen also refers to translating terms and phrases used by authors of documents or by a user who is searching for documents into a common internal vocabulary. This merely refers to using a common vocabulary, and does not provide any teaching or hint of matching a detected context to a concept list appropriate to the detected context.

The other passage of Chen in column 8 cited by the Examiner as purportedly disclosing the "matching" element of claim 1 is column 8, lines 14-37, which refers to predefined topics and topic hierarchies. In the cited column 8 passage, it is stated that the user can be guided in the formulation of a query by having a system present a view of the progression of the query along a hierarchy of topics. Chen, 8:16-20. If the hierarchy of topics disclosed in this passage of Chen is considered the "concept list" of claim 1, it is clear that there is no hint of matching a detected context to this hierarchy of topics. The context referred to in Chen is used to modify search criteria of a query—there is no teaching in Chen that its context is matched to the hierarchy of topics described in column 8 of Chen—therefore, Chen does not disclose matching the detected context to a concept list, as recited in claim 1.

In view of the foregoing, it is clear that Chen does not anticipate the subject matter of claim 1 and its dependent claims.

Independent claim 13 and 14 are similarly allowable over Chen.

Reversal of the final rejection of the above claims is respectfully requested.

2. Claim 3.

Claim 3 depends from claim 1 and is therefore allowable for at least the same reasons as claim 1. Moreover, claim 3 further recites that the concept list corresponds to a structured list of concepts and keywords related to a specified context. With respect to claim 3, the Examiner cited claims 5 and 14 of Chen as purportedly disclosing the subject matter of claim 3. 4/2/2009 Office Action at 3.

Claim 5 of Chen refers to a query service device that includes a term mapping device that determines the search topic in dependence upon a user query and a user context. Determining a search topic based on a user query and a user context has nothing to do with a structured list of concepts and keywords related to a specified context.

Claim 14 recites a data structure that is a hierarchal structure, and that determination of a search topic is dependent upon the hierarchical structure. Again, there is no disclosure here that the hierarchical structure of Chen is a structured list of concepts and keywords related to a specified context.

Claim 3 is therefore further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

3. Claims 2, 11.

Independent claim 2 is allowable over Chen for at least some of the same reasons as stated above with respect to claim 1. Specifically, Chen does not disclose using a detected context to transform structured descriptions (note plural sense) into reduced structured

descriptions, and then matching the reduced structured descriptions. In Chen, a query is modified based on context—however, there is no teaching by Chen of matching two queries that have corresponding modified search terms.

Claim 2 and its dependent claims are therefore not anticipated by Chen.

Reversal of the final rejection of the above claims is respectfully requested.

4. Claim 6.

Independent claim 6 is allowable since Chen fails to disclose matching a detected context to a concept list appropriate to the detected concept, as discussed above in connection with claim 1. Therefore, claim 6 and its dependent claims are not anticipated by Chen.

Reversal of the final rejection of the above claim is respectfully requested.

5. Claims 7-9.

Claim 7 depends from claim 6 and is therefore allowable for at least the same reasons as claim 6. Moreover, claim 7 is further allowable for the further additional reason stated above with respect to claim 3. Claim 7 and its dependent claims are therefore not anticipated by Chen.

Reversal of the final rejection of the above claims is respectfully requested.

CONCLUSION

In view of the foregoing, reversal of all final rejections and allowance of all pending claims is respectfully requested.

Respectfully submitted,

Date: September 2, 2009

/Dan C. Hu/

Dan C. Hu
Registration No. 40,025
TROP, PRUNER & HU, P.C.
1616 South Voss Road, Suite 750
Houston, TX 77057-2631
Telephone: (713) 468-8880
Facsimile: (713) 468-8883

VIII. APPENDIX OF APPEALED CLAIMS

The claims on appeal are:

1. A method of matching structured descriptions, the method including the steps of:
   a. detecting a context reflecting an environment in which the matching is to occur;
   b. matching the detected context to a concept list appropriate to the detected context;
   c. using the concept list to transform the structured descriptions into reduced structured descriptions;
   d. matching the reduced structured descriptions; and
   e. providing an output representing the matching between the structured descriptions.

2. A method of matching structured descriptions, the method including the steps of:
   a. detecting a context reflecting an environment in which the matching is to occur;
   b. using the detected context to transform the structured descriptions into reduced structured descriptions;
   c. matching the reduced structured descriptions; and
   d. providing an output representing the matching between the structured descriptions.

3. A method as claimed in claim 1 wherein the concept list corresponds to a structured list of concepts and keywords related to a specified context.

4. A method as claimed in claim 1 wherein one or more of the structured descriptions is reduced by matching keywords in one or more of the structured descriptions with keywords in the concept list and the removing any unmatched keyword concepts from the corresponding structured description.

5. A method as claimed in claim 1 wherein the context determination is based on measurement of a physical location in which the matching is to occur, direct reception of data indicating the context or statistical analysis of characteristics of the environment in which the matching is to occur.

6. A method of simplifying a structured description including the steps of:
   a. detecting a context reflecting an environment in which the simplification is to occur;
   b. matching the detected context to a concept list appropriate to the detected context;
   c. using the concept list to transform the structured descriptions into reduced structured descriptions.

7. A method as claimed in claim 6 wherein the wherein the concept list corresponds to a structured list of concepts and keywords related to a specified context.

8. A method as claimed in claim 7 wherein one or more of the structured descriptions is reduced by matching keywords in one or more of the structured descriptions with keywords in the concept list and the removing any unmatched keyword concepts from the corresponding structured description.

9. A method as claimed in claim 7 wherein the transformation process preserves relevant hierarchical structure in the structured description by pruning the keyword tree to remove unmatched keywords while preserving the remaining structure of the description.

10. A method as claimed in claim 1 wherein one or more of the structured descriptions and the concept list are defined according to dissimilar ontologies, the method further including the steps of converting one or more of the structured descriptions and the concept list to a common ontology prior to matching or reduction of the structured descriptions.

11. A method as claimed in claim 2 wherein one or more of the structured descriptions are defined according to dissimilar ontologies, the method further including the steps of converting one or more of the structured descriptions to a common ontology prior to matching or reduction of the structured descriptions.

12. A computer system adapted to carry out the method as claimed in claim 1.

13. A system for matching structured descriptions including:
    a. means for detecting a context or receiving a detected context, reflecting an environment in which the matching is to occur;
    b. matching means adapted to match the detected context to a concept list appropriate to the detected context stored in a context database;
    c. an edit engine adapted to use the concept list to transform the one or more structured descriptions into reduced structured descriptions;
    d. matching means adapted to match the reduced structured descriptions; and
    e. output means adapted to provide an output representing the matching between the structured descriptions.

14. A method of facilitating the matching structured descriptions, the method including the steps of:

a. receiving a detected context reflecting an environment in which the matching is to occur;

b. matching the detected context to a concept list appropriate to the detected context;

c. using the concept list to transform the structured descriptions into reduced structured descriptions;

d. matching the reduced structured descriptions; and

e. providing an output representing the matching between the structured descriptions.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.